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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,734	09/09/2003	Ed H. Frank	14183US02	2791

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EXAMINER

GOETZE, SIMON A

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/658,734	FRANK ET AL.	
	Examiner	Art Unit	
	Simon A. Goetze	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/20/04 & 1/14/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

Information Disclosure Statement

2. The information disclosure statements submitted on 1/20/2004 and 1/14/2005 have been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 1-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Haddad (US Patent Application Publication 2003/0133420)** in view of **Paranchych et al. (US Patent Application Publication 2002/0071419)**.

Consider **claim 1**, Haddad discloses a method for providing load balancing in a hybrid wired/wireless local area network (*Abstract; Page 2, Paragraphs 0002-0004*), the method comprising:

receiving at least one polling message from a network device by at least one of a plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*);

responsive to said at least one polling message, determining a load on each one of said plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*);
and

sending said determined load of said each one of said access points to said network device (*the controller uses the determined value to determine the load – Page 3, Paragraphs 0035 and 0040*).

However, Haddad discloses that the load balancing procedure is performed by a network controller. Paranchych et al. discloses that the load is monitored by the access device in order to determine the most appropriate access point (*Page 1, Paragraphs 0008 and 0010; Page 2, Paragraphs 0012, 0022-0029*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Paranchych et al. with those of Haddad because this allows for the access device to aid in the decision of the appropriate access point, making the decision more efficient and reliable.

Consider **claim 9**, Haddad discloses a machine-readable storage, having stored thereon a computer program having at least one code section for providing load management in a hybrid wired/wireless local area network (*Abstract; Page 2, Paragraphs 0002-0004*), the at least one code section executable by a machine for causing the machine to perform the steps comprising:

receiving at least one polling message from a network device by at least one of a plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*);

responsive to said at least one polling message, determining a load on each one of said plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*);
and

sending said determined load of said each one of said access points to said network device (*the controller uses the determined value to determine the load – Page 3, Paragraphs 0035 and 0040*).

However, Haddad discloses that the load balancing procedure is performed by a network controller. Paranchych et al. discloses that the load is monitored by the access device in order to determine the most appropriate access point (*Page 1, Paragraphs 0008 and 0010; Page 2, Paragraphs 0012, 0022-0029*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Paranchych et al. with those of Haddad because this allows for the access device to aid in the decision of the appropriate access point, making the decision more efficient and reliable.

Consider **claim 17**, Haddad discloses a system for providing load management in a hybrid wired/wireless local area network (*Abstract; Page 2, Paragraphs 0002-0004*), the system comprising:

at least one receiver adapted to receive at least one polling message from a network device by at least one of a plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*);

at least one controller adapted to determine a load on each one of said plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*); and

at least one transmitter adapted to send said determined load of said each one of said access points to said network device (*the controller uses the determined value to determine the load – Page 3, Paragraphs 0035 and 0040*).

However, Haddad discloses that the load balancing procedure is performed by a network controller. Paranchych et al. discloses that the load is monitored by the access device in order to determine the most appropriate access point (*Page 1, Paragraphs 0008 and 0010; Page 2, Paragraphs 0012, 0022-0029*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Paranchych et al. with those of Haddad because this allows for the access device to aid in the decision of the appropriate access point, making the decision more efficient and reliable.

Consider **claim 2**, as applied to claim 1 above, Haddad as modified by Paranchych et al. further discloses interpreting said at least one polling message by at least one of said plurality of access points, which is located in operating range of said access device (*Paranchych et al. – Page 1, Paragraph 0008; Page 2, Paragraph 0022*).

Consider **claim 3**, as applied to claim 2 above, Haddad as modified by Paranchych et al. further discloses selecting an access point from said plurality of access points having a least load (*Paranchych et al. – select data transmission from the most desirable access point – Page 2, Paragraphs 0024-0029*).

Consider **claim 4**, as applied to claim 3 above, Haddad as modified by Paranchych et al. further discloses selecting said access point having a least load by said access device to provide service (*Paranchych et al. – select data transmission from the most desirable access point – Page 2, Paragraphs 0024-0029*).

Consider **claim 5**, as applied to claim 1 above, Haddad as modified by Paranchych et al. further discloses sending said received at least one polling message from said at least one of a plurality of access points to a switch using a messaging protocol message (*the node sends the request to the controller 13 which serves as a switch to the network – Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*); and

receiving said at least one polling message by said switch (*the node sends the request to the controller 13 which serves as a switch to the network – Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*).

Consider **claim 6**, as applied to claim 2 above, Haddad as modified by Paranchych et al. further discloses determining at least a load on at least a portion of said plurality of access points (*the load of the nodes is determined – Page 3, Paragraphs 0035 and 0040*).

Consider **claim 7**, as applied to claim 6 above, Haddad as modified by Paranchych et al. further discloses sending information corresponding to said determined load to at least a portion of said plurality of access points using a messaging protocol message (*a general command is issued through the nodes to the connected devices – Page 3, Paragraph 0037*).

Consider **claim 8**, as applied to claim 7 above, Haddad as modified by Paranchych et al. further discloses redistributing a load on said at least a portion of said plurality of access points (*the load is redistributed by transferring access terminals to other nodes – Page 3, Paragraph 0037*).

Consider **claim 10**, as applied to claim 9 above, Haddad as modified by Paranchych et al. further discloses code for interpreting said at least one polling message by at least one of said

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plurality of access points, which is located in operating range of said access device (*Paranchych et al. – Page 1, Paragraph 0008; Page 2, Paragraph 0022*).

Consider **claim 11**, as applied to claim 10 above, Haddad as modified by Paranchych et al. further discloses code for selecting an access point from said plurality of access points having a least load (*Paranchych et al. – select data transmission from the most desirable access point – Page 2, Paragraphs 0024-0029*).

Consider **claim 12**, as applied to claim 11 above, Haddad as modified by Paranchych et al. further discloses selecting said access point having a least load by said access device to provide service (*Paranchych et al. – select data transmission from the most desirable access point – Page 2, Paragraphs 0024-0029*).

Consider **claim 13**, as applied to claim 9 above, Haddad as modified by Paranchych et al. further discloses code for sending said received at least one polling message from said at least one of a plurality of access points to a switch using a messaging protocol message (*the node sends the request to the controller 13 which serves as a switch to the network – Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*); and

receiving said at least one polling message by said switch (*the node sends the request to the controller 13 which serves as a switch to the network – Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*).

Consider **claim 14**, as applied to claim 10 above, Haddad as modified by Paranchych et al. further discloses code for determining at least a load on at least one portion of said plurality of access points (*the load of the nodes is determined – Page 3, Paragraphs 0035 and 0040*).

Consider **claim 15**, as applied to claim 14 above, Haddad as modified by Paranchych et al. further discloses code for sending information corresponding to said determined load to at least a portion of said plurality of access points using a messaging protocol message (*a general command is issued through the nodes to the connected devices – Page 3, Paragraph 0037*).

Consider **claim 16**, as applied to claim 15 above, Haddad as modified by Paranchych et al. further discloses code for redistributing a load on said at least a portion of said plurality of access points (*the load is redistributed by transferring access terminals to other nodes – Page 3, Paragraph 0037*).

Consider **claim 18**, as applied to claim 17 above, Haddad as modified by Paranchych et al. further discloses that at least one controller is adapted to interpret said at least one polling message by at least one of said plurality of access points, which is located in operating range of said access device (*Paranchych et al. – Page 1, Paragraph 0008; Page 2, Paragraph 0022*).

Consider **claim 19**, as applied to claim 18 above, Haddad as modified by Paranchych et al. further discloses that at least one controller is adapted to select an access point from said plurality of access points having a least load (*Paranchych et al. – select data transmission from the most desirable access point – Page 2, Paragraphs 0024-0029*).

Consider **claim 20**, as applied to claim 19 above, Haddad as modified by Paranchych et al. further discloses that at least one controller is adapted to select said access point having a least load by said access device to provide service (*Paranchych et al. – select data transmission from the most desirable access point – Page 2, Paragraphs 0024-0029*).

Consider **claim 21**, as applied to claim 17 above, Haddad as modified by Paranchych et al. further discloses that at least one transmitter is adapted to send said received at least on

polling message from said at least one of a plurality of access points to a switch using a messaging protocol message (*the node sends the request to the controller 13 which serves as a switch to the network – Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*); and

Consider **claim 22**, as applied to claim 17 above, Haddad as modified by Paranchych et al. further discloses at least one receiver adapted to receive said at least one polling message by said switch (*the node sends the request to the controller 13 which serves as a switch to the network – Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*).

Consider **claim 23**, as applied to claim 18 above, Haddad as modified by Paranchych et al. further discloses that at least one controller is adapted to determine at least a load on at least of portion of said plurality of access points (*the load of the nodes is determined – Page 3, Paragraphs 0035 and 0040*).

Consider **claim 24**, as applied to claim 23 above, Haddad as modified by Paranchych et al. further discloses that at least one controller is adapted to send information corresponding to said determined load to at least a portion of said plurality of access points using a messaging protocol message (*a general command is issued through the nodes to the connected devices – Page 3, Paragraph 0037*).

Consider **claim 25**, as applied to claim 24 above, Haddad as modified by Paranchych et al. further discloses that at least one controller is adapted to redistribute a load on said at least a portion of said plurality of access points (*the load is redistributed by transferring access terminals to other nodes – Page 3, Paragraph 0037*).

Consider **claim 26**, as applied to claim 23 above, Haddad as modified by Paranchych further discloses at least one controller is a bandwidth management controller, a quality of

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service controller, a load balancing controller, a session controller and a network management controller (*the communications controller 13 performs bandwidth management, QOS services, load balancing, session control, and network management – Page 2, Paragraph 0029; Page 3, Paragraphs 0035, 0037, and 0040*).

Conclusion

7. The prior art made of record and not relied upon and is considered pertinent to applicant's disclosure is listed below.

US 20040192327 A1	User equipment (UE) assisted system database update	Chandra, Arty et al.
US 20050208950 A1	Load balancing in wireless communication network	Hasse, Sinivaara

8. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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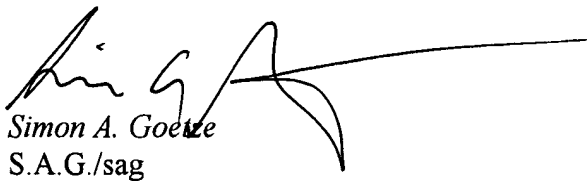
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9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Simon A. Goetze whose telephone number is (571) 270-1113. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday from 7:30am to 4:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.


Simon A. Goetze
S.A.G./sag


NICK CORSARO
SUPERVISORY PATENT EXAMINER
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December 11, 2006